

## **REMARKS**

### **I. Introduction**

Claims 1, 5, 19 and 20 are pending in the present application. In view of the foregoing amendments and the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

### **II. Rejection of Claims 19 to 20 Under 35 U.S.C. § 112**

Claims 19 to 20 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. Specifically, the Final Office Action contends that "[t]he claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." Final Office Action at page 2. The Final Office Action states that "[t]here is no support in the specification for the claimed method of manufacturing a filter element for a dialyzer set forth in claims 19-20." Final Office Action at page 2.

Applicants respectfully disagree and maintain that the recitation in claims 19 and 20 of manufacturing a filter element for a dialyzer is fully supported by the originally-filed Specification and drawings. For instance, the Specification states at page 1, lines 3 to 4, that "[t]he present invention relates to a method for the manufacture of fiber bundles and to an apparatus for manufacturing fiber bundles." The Specification also states at page 1, lines 6 to 7, that "[i]n known methods for the manufacture of fiber bundles, for example for the manufacture of dialyzers ..." Emphasis added. In addition, the Specification states at page 1, lines 6 to 7, that the "structure [of the present invention] can substantially improve the performance rating of the fiber bundle, when used for example, in a dialysis machine." Emphasis added. Fiber bundles are employed as the filter element of dialyzers. Therefore, the recitation in claims 19 and 20 of manufacturing a filter element for a dialyzer is fully supported by the originally-filed Specification and drawings.

In view of the foregoing, it is respectfully submitted that claims 19 and 20 fully comply with the requirements of 35 U.S.C. § 112, and withdrawal of this rejection is therefore respectfully requested.

### **III. Rejection of Claims 1 and 19 Under 35 U.S.C. §103(a)**

Claims 1 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,304,821 ("Matino et al.") in view of U.S. Patent No. 3,986,417 ("Anderson"). It is respectfully submitted that the combination of Matino et al. and Anderson does not render obvious the present claims for the following reasons.

Claim 1 relates to a method for manufacturing a fiber bundle having a fiber bundle length from a required number of unbound partial bundles. Claim 1 has been amended herein without prejudice to recite that the method includes the step of transporting at a first speed a fiber bundle strand using at least one feed element. Support for this amendment is set forth below. Claim 1 recites that the method includes the step of pre-cutting the fiber bundle strand into unbound partial bundles, the unbound partial bundles having a length when pre-cut equal to the fiber bundle length. Claim 1 also recites that the method includes the steps of releasing the unbound partial bundles from the at least one feed element. Claim 1 has been amended herein without prejudice to recite that the method includes the step of gripping the unbound partial bundles using at least one gripping element and moving the unbound partial bundles at a speed that is less than the first speed. Support for this amendment can be found, for instance, at page 3, lines 18 to 22 of the Specification which states that "[i]t is particularly advantageous ... if the speed of the gripping elements is reduced after the gripping of the partial bundles." The Specification also states at page 3, lines 26 to 29 that "the speed of the gripping elements can be reduced after the gripping of the partial bundles, whereby a release and placing of the partial bundles in a suitable collection device or storage space is prepared." In addition, claim 1 recites that the method includes the steps of releasing the unbound partial bundles from the at least one gripping element and placing the unbound partial bundles in a first collection trough of a collection device. Claim 1 also recites that these steps are repeated for the required number of unbound partial bundles until a required thickness of the fiber bundle is obtained in the first collection trough.

Claim 19 relates to a method for manufacturing a filter element for a dialyzer, the filter element including a fiber bundle having a fiber bundle length from a required number of unbound partial bundles. Claim 19 has been amended herein without prejudice to recite that the method includes the step of transporting at a first

speed a fiber bundle strand using at least one feed element. Support for this amendment is set forth above. Claim 19 recites that the method includes the step of pre-cutting the fiber bundle strand into unbound partial bundles, the unbound partial bundles having a length when pre-cut equal to the fiber bundle length. Claim 19 also recites that the method includes the steps of releasing the unbound partial bundles from the at least one feed element. Claim 19 has been amended herein without prejudice to recite that the method includes the step of gripping the unbound partial bundles using at least one gripping element and moving the unbound partial bundles at a speed that is less than the first speed. Support for this amendment is set forth above. In addition, claim 19 recites that the method includes the steps of releasing the unbound partial bundles from the at least one gripping element and placing the unbound partial bundles in a first collection trough of a collection device. Claim 19 also recites that these steps are repeated for the required number of unbound partial bundles until a required thickness of the fiber bundle is obtained in the first collection trough.

The Final Office Action states that "Matino discloses the invention substantially as claimed including steps of: a) transporting a fiber bundle strand using at least one feed element (5,6); b) pre-cutting the fiber bundle strand into unbound partial bundles, the unbound partial bundles having a length when re-cut equal to the fiber bundle length (1, 2); c) releasing the unbound partial bundles from the at least feed element (the unbound partial bundles are released from the feed element as the fiber bundle strand is cut); d) gripping the unbound partial bundles using at least one gripping element (8-11); e) releasing the unbound partial bundles from the at least one gripping element (col. 1, lines 17-18); f) repeating steps for the required number of unbound partial bundles until a required thickness of the fiber bundle is obtained." Final Office Action at pages 2 to 3. The Final Office Action admits that "Matino fails to disclose a step of placing the unbound partial bundles in a first collection trough of a collection device." Final Office Action at page 3. However, the Final Office Action states that "Anderson teaches the use of trough for collecting cut filaments." Final Office Action at page 3. The Final Office Action concludes that "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the trough as taught by Anderson on the device of Matino in order to gather the unbound partial bundles released from the gripping element." Final Office Action at page 3. Furthermore, the Final Office

Action states that “[r]egarding claim 19, the fiber bundles manufactured by the modified method of Matino can be used for manufacturing a filter element for a dialyzer.” Final Office Action at page 3.

It is respectfully submitted that the combination of Matino et al. and Anderson does not render obvious the present invention for at least the reason that the combination of Matino et al. and Anderson fails to disclose, or even suggest, all of the limitations of the present claims. For instance, it is respectfully submitted that the combination of Matino et al. and Anderson fails to disclose, or even suggest, the step of gripping the unbound partial bundles using at least one gripping element and moving the unbound partial bundles at a speed that is less than the first speed, as recited in claims 1 and 19. In contrast and as set forth above, Matino et al. describe that “[t]he traveling speed of the endless transfer belts 10 and 11 is slightly greater than the feeding speed of the cutter rollers 1 and 2, thereby applying a draft action to the fiber tows *f* between the cutting point S of the cutter rollers 1 and 2 and the nip point of the endless transfer belts 10 and 11.” Column 3, lines 17 to 22, emphasis added. Thus, in Matino et al., the speed of the endless transfer belts 10 and 11, e.g., identified by the Examiner as “gripping elements”, is greater than the speed at which the fiber bundle strand is moved prior to being “gripped”. This is in direct contravention to the present claims. Furthermore, Anderson is not relied upon to describe or suggest, and in fact does not describe or suggest, the step of gripping unbound partial bundles using at least one gripping element and moving the unbound partial bundles at a speed that is less than a first speed, as recited in claims 1 and 19.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. In re Royka, 490 F.2d

981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). As more fully set forth above, it is respectfully submitted that the combination of Matino et al. and Anderson does not disclose, or even suggest, the step of gripping the unbound partial bundles using at least one gripping element and moving the unbound partial bundles at a speed that is less than the first speed, as recited in claims 1 and 19.

Moreover, it is respectfully submitted that the cases of In re Fine, supra, and In re Jones, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), make plain that the Final Office Action's generalized assertions that it would have been obvious to modify the reference do not properly support a § 103 rejection. It is respectfully submitted that those cases make plain that the Final Office Action reflects a subjective "obvious to try" standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of In re Fine stated that:

The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. . . .

**Instead, the Examiner relies on hindsight in reaching his obviousness determination. . . . One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.**

In re Fine, 5 U.S.P.Q.2d at 1598 to 1600 (citations omitted; italics in original; emphasis added). Likewise, the Court in the case of In re Jones stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

**Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill . . . would have been motivated to make the modifications . . . necessary to arrive at the claimed [invention].**

In re Jones, 21 U.S.P.Q.2d at 1943, 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the present Final Office Action offers no evidence whatsoever, but only conclusory hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding. Unsupported assertions are not evidence as to why a person having ordinary skill in the art would be motivated to combine or modify the references to provide the claimed subject matter of the claims to address the problems met thereby. Accordingly, the Office must provide proper evidence of a motivation for combining or modifying the references to provide the claimed subject matter.

More recently, the Federal Circuit in the case of In re Kotzab has made plain that even if a claim concerns a "technologically simple concept" -- which is not the case here -- there still must be some finding as to the "specific understanding or principle within the knowledge of a skilled artisan" that would motivate a person having no knowledge of the claimed subject matter to "make the combination in the manner claimed," stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed. In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper prima facie case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000) (emphasis added). Again, it is believed that there have been no such findings.

Accordingly, there is no evidence that the references relied upon, whether taken alone or modified, would provide the features and benefits of claims 1 and 19. It is therefore respectfully submitted that claims 1 and 19 are allowable for these reasons.

#### **IV. Rejection of Claims 5 and 20 Under 35 U.S.C. §103(a)**

Claims 5 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Matino et al. in view of Japanese Patent No. 55142580 ("JP '580"). It is respectfully submitted that the combination of Matino et al. and JP '580 does not render obvious the present claims for the following reasons.

Claim 5 relates to a method for manufacturing fiber bundles having a fiber bundle length. Claim 5 has been amended herein without prejudice to recite that the method includes the step of transporting at a first speed a fiber bundle strand using at least one feed element. Support for this amendment is set forth above. Claim 5 recites that the method includes the step of pre-cutting the fiber bundle strand into unbound partial bundles, the unbound partial bundles having a length when pre-cut equal to the fiber bundle length. Claim 5 recites that the method includes the step of releasing the unbound partial bundles from the at least one feed element. Claim 5 recites that the method includes the step of gripping the unbound partial bundles using at least one gripping element. Claim 5 has been amended herein without prejudice to recite that the method includes the step of moving the unbound partial bundles at a speed that is less than the first speed. Support for this amendment is set forth above. Claim 5 recites that the method includes the step of releasing the unbound partial bundles from the at least one gripping element. Claim 5 recites that the method includes the step of placing the unbound partial bundles having the same lengths in a first collection trough of a collection device. Claim 5 recites that the method includes the step of rotating the collection device after the first collection trough is filled and placing the unbound partial bundles in a further collection trough of the collection device.

Claim 20 relates to a method for manufacturing a filter element for a dialyzer, the filter element including fiber bundles having a fiber bundle length. Claim 20 has been amended herein without prejudice to recite that the method includes the step of transporting at a first speed a fiber bundle strand using at least one feed element. Support for this amendment is set forth above. Claim 20 recites that the method includes the step of pre-cutting the fiber bundle strand into unbound partial bundles, the unbound partial bundles having a length when pre-cut equal to the fiber bundle length. Claim 20 recites that the method includes the step of releasing the unbound partial bundles from the at least one feed element. Claim 20 recites that the method includes the step of gripping the unbound partial bundles using at least one gripping element. Claim 20 has been amended herein without

prejudice to recite that the method includes the step of moving the unbound partial bundles at a speed that is less than the first speed. Support for this amendment is set forth above. Claim 20 recites that the method includes the step of releasing the unbound partial bundles from the at least one gripping element. Claim 20 recites that the method includes the step of placing the unbound partial bundles having the same lengths in a first collection trough of a collection device. Claim 20 recites that the method includes the step of rotating the collection device after the first collection trough is filled and placing the unbound partial bundles in a further collection trough of the collection device.

The Final Office Action states that “Matino discloses the invention substantially as claimed except for steps of placing the unbound partial bundles in a first collection trough of a collection device and rotating the collection device after the first trough is filled and placing the unbound partial bundles in a further trough of the collection device.” Final Office Action at pages 3 to 4. However, the Final Office Action states that “‘580 discloses a rotating collection device having troughs (7).” Final Office Action at page 4. The Final Office Action concludes that “[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the collection device as taught by ‘580 on the device of Matino in order to selectively collect a required volume of fiber bundles.” Final Office Action at page 4. Furthermore, the Final Office Action states that “[r]egarding claim 20, the fiber bundles manufactured by the modified method of Matino can be used for manufacturing a filter element for a dialyzer.” Final Office Action at page 4.

It is respectfully submitted that the combination of Matino et al. and JP ‘580 does not render obvious the present invention for at least the reason that the combination of Matino et al. and JP ‘580 fails to disclose, or even suggest, all of the limitations of the present claims. For instance, it is respectfully submitted that the combination of Matino et al. and JP ‘580 fails to disclose, or even suggest, the step of gripping the unbound partial bundles using at least one gripping element and moving the unbound partial bundles at a speed that is less than the first speed, as recited in claims 5 and 20. In contrast and as set forth above, Matino et al. describe that “[t]he traveling speed of the endless transfer belts 10 and 11 is slightly greater than the feeding speed of the cutter rollers 1 and 2, thereby applying a draft action to the fiber tows  $f'$  between the cutting point S of the cutter rollers 1 and 2 and the nip point of the endless transfer belts 10 and 11.” Column 3, lines 17 to 22, emphasis



added. Thus, in *Matino et al.*, the speed of the endless transfer belts 10 and 11, e.g., identified by the Examiner as "gripping elements", is greater than the speed at which the fiber bundle strand is moved. This is in direct contravention to the present claims. Furthermore, Anderson is not relied upon to describe or suggest, and in fact does not describe or suggest, the step of gripping unbound partial bundles using at least one gripping element and moving the unbound partial bundles at a speed that is less than a first speed, as recited in claims 5 and 20.

Accordingly, there is no evidence that the references relied upon, whether taken alone or in combination, would provide the features and benefits of claims 5 and 20. It is therefore respectfully submitted that claims 5 and 20 are allowable for these reasons.

**V. Conclusion**

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,  
KENYON & KENYON

Dated: *Sept. 2, 2004*

By: 

Thomas C. Hughes  
Reg. No. 42,674

One Broadway  
New York, New York 10004  
(212) 425-7200